Northern Homelands, Northern Frontier: Linking Culture and Economic Security in Contemporary Livelihoods in Boreal and Cold Temperate Forest Communities in Northern Canada

Andrew J. Chapeskie[1]

Abstract.—This paper highlights the environmental pressures that have historically been brought to bear on the northern forests of Canada. It then presents the idea of the northern frontier forests of Canada as Indigenous landscapes whose ecological diversity and abundance have historically been nurtured in no small measure by their original inhabitants. It then proposes how contemporary community-based resource management institutions might embody customary Indigenous resource stewardsip practice to provide a contemporary foundation for a northern sustainable forest economy supporting local Community Economic Development (CED) initiatives that benefit all Canadians.

INTRODUCTION

Canada is often said to be an expression of "northern-ness." Some say that the historical aproach of the country to reconciling diverse regional interests through decentralist and pluralist institutions is how its 'nordicity' is embodied. For many Canadians the "northern-ness" of the country is a truism that is sometimes said to be too obvious to be worth repeating. However, the extent to which the expansive northern cold temperate and boreal forests that blanket much of Canada remain integral to the cultural identity of the country cannot be underestimated. These forests have simultaneously been considered by most Canadians as representing the "wilderness" of their country as well as constituting much of its "natural wealth." In this context, few Canadians have questioned that the natural wealth contained in the forests could be "exploited" to support the economic well-being of the country and that, at the same time, there would always be vast forest regions that could be preserved as wilderness.

This is now changing. Contemporary trends in environmental awareness coupled with immense changes in the resource-based economy of northern Canada, not least of these being a rapid expansion of the rate of industrial extraction of timber resources, are now leading many Canadians to debate the future of their forest landscapes. "Remote" and "wild" northern forests in Canada are no longer so remote and wild. Which of the forest landscapes of the country should be protected in their natural state? Which should be developed for forestry? These are the dominant questions driving the debate over the future of northern Canadian forests.

Such questions could be seen as important as far as they go. However, this paper proposes that these questions do not go nearly far enough to address the historical and contemporary ecological and social reality (the two are inseparable) of northern Canada. This reality is far more complex than these questions can hope to address. Indeed, this reality challenges old prejudices and assumptions about the historical and contemporary nature of the northern forest landscapes of Canada and the First Peoples who have lived in them since time immemorial. Further, it is a reality possessed of latent possibilities for conserving both cultural and biological diversity, maintaining ecological resilience, and promoting economic security for northern forest communities in Canada. It is a reality that will be ignored by Canada at its own risk.

[1] *President of The Taiga Institute for Land, Culture, and Economy, Suite A, 150 Main Street South, Kenora, Ontario, Canada, P9N 1S9; Phone: 807-468-9607; Fax: 807-468-3822; e-mail: taiga-institute@voyageur.ca.*

NORTHERN CANADA: FOREST HOMELANDS, FORESTRY FRONTIER

In southern Canada, where most of the population of the country lives, the debate over the future of northern forest landscapes centers around which areas should be developed for industrial forestry and which should be preserved in their "natural state." Nothing highlights this debate, as well as pointing to the biases and assumptions that lie beneath it, better than a July 1999 report of the World Wildlife Fund Canada (WWF Canada) entitled *Forests for Life - Canada's Commitment to Forest Protected Areas: a WWF Status Report* (World Wildlife Fund Canada 1999). The first map in the report (WWF Canada 1999, 3) and shown here as figure 1 illustrates the vastness of the Canadian forest landscape—especially of the boreal forest regions of the country. This is a map of the forest regions of Canada (Forest Regions of Canada map by J.S. Rowe, reproduced by permission of the Canadian Forest Service, Natural Resources Canada). The second map in the report (WWF Canada 1999, 5) is a compilation of data indicating the allocation of commercial forestry tenure on the provincial forest landscapes of Canada. Figure 2 in this paper dramatically indicates this "final frontier" of industrial forestry across the country. The development of the last pristine or old growth or primary growth regions of the boreal forest in Canada (when examined in relation to the boreal forest region shown on the map in figure 1) is now looming large on these landscapes.

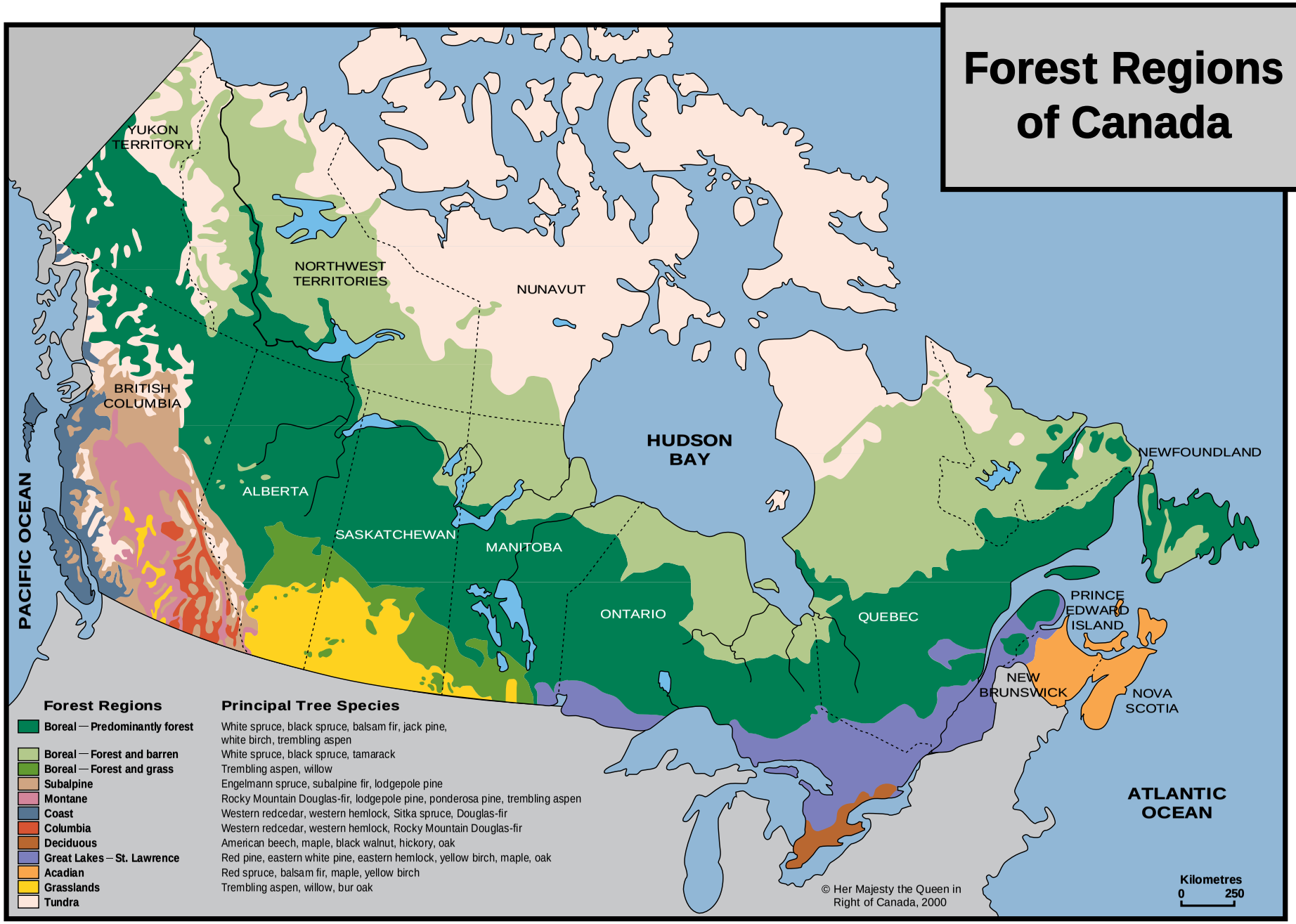
The second map illustrates the debate within dominant "settler society" over development and protection with respect to the forests of Canada. This debate is rooted in the concept of the resource cycle in forestry, which holds that, in a market economy, it is "...economically rational to exhaust resources with a slow annual growth rate, converting natural resources to economic capital for reinvestment in other industries with a shorter time horizon" (Clapp 1998, 130). In forestry, the dynamics of the resource cycle are said to lead to the liquidation of high value old-growth forest resources and a "falldown" in yields of wood per hectare in the transition from old-growth to second-growth timber on forest landscapes (Clapp 1998, 136). The case of the liquidation of the Great Lakes white pine forests is often cited as being emblematic of the resource cycle in forestry (Clapp 1998, 130). This is the type of industrial environmental impact that the environmental movement has sought to mitigate through establishment of ever more and larger protected areas in the forest landscapes of northern Canada. Throughout the debate, however, it is legitimate to ask: Where are the Indigenous peoples of northern Canada?

The importance of this question cannot be underestimated in the Canadian context. Aside from the issue of whether the ecological effects of industrial forestry could or should be addressed, even in part, through the creation of more protected areas, there remains a more fundamental question: Where and how do Indigenous peoples living within these landscapes fit in? These questions pertain to the very nature of Indigenous societies and the customary livelihood relationships these societies maintained with the landscapes of their forest homelands.

For many within the environmental movement as well as within the forest industry, arguments both for forest protection and development in Canada are predicated on the assumption that the country's northern forest landscapes are "natural". WWF Canada states this about Indigenous people in Canada who live in forest regions:

> "... almost 80 percent of the Aboriginal people of Canada are settled within forest regions, their livelihood still drawing **on the natural bounty** and diversity of these homelands" (WWF Canada 1999, 2).

It is true that 80 percent of Indian Reserves are located within the forest regions of Canada (in provinces such as Ontario and Manitoba, the majority of status Indians—people recognized as Indians by the Government of Canada under the Federal Indian Act—actually live in urban centers). But there are more fundamental questions embedded within this reality: What are the customary relationships of Indigenous peoples to these homelands in the forest regions of Canada? Have "Indigenous forests" always been "natural" and "wild?" If they have not always been "wild" or "natural," what is the significance for the promotion of sustainable livelihoods today? In the context of customary Indigenous relationships to land, what role should Aboriginal people play in the development or protection of the forests in which they live? Do the members of these societies even find such a dualism intelligible, let alone practical?



Natural Resources Canada
Canadian Forest Service
Ressources naturelles Canada
Service canadien des forêts

Figure 1.—*Forest Regions of Canada (Forest Regions of Canada map by J.S. Rowe, reproduced by permission of the canadian Forest Service, Natural Resources Canada).*

Canada

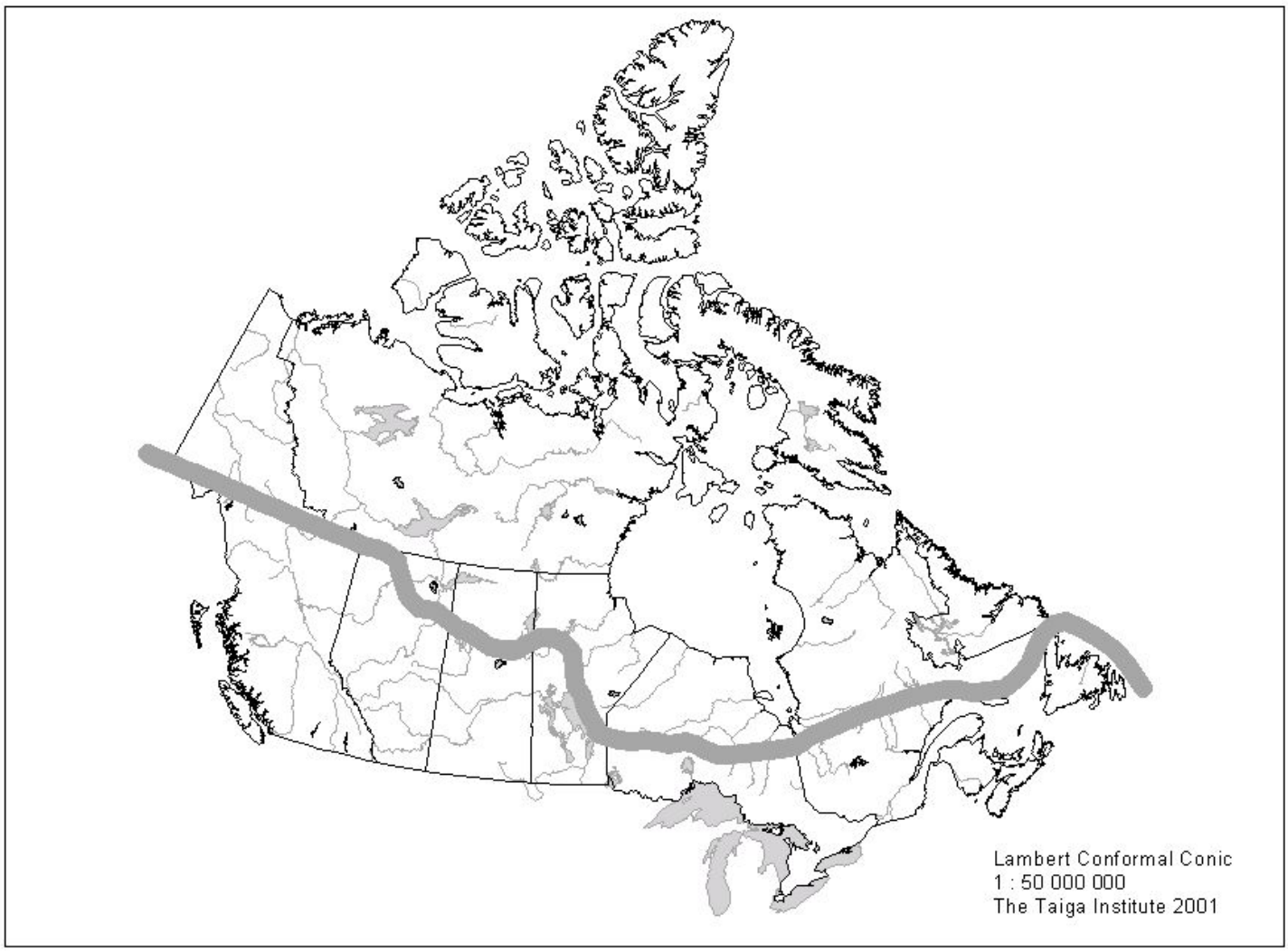


Figure 2.—*Forest allocations in Canada.*

WWF Canada notes in *Forests for Life* that "94 per cent of Canada's forest land is publicly owned, 71 per cent by the 10 provincial governments and 23 per cent by the federal government" (WWF Canada 1999, 4). However, it is critically important to note another fact on the ground: Indigenous people constitute a majority of the population within many of the northern Canadian forest landscapes. Nothing illustrates this better than figure 3, which is a map indicating languages spoken "on the ground" in North America as of 1980 (Academic American Encyclopaedia 1980). Additionally, in many areas where Indigenous peoples are not the majority of the people actually living within forest landscapes of northern Canada, they constitute rapidly growing (see figure 4), and in many cases already large, minorities. What are Indigenous interests in these forests landscapes? Why are Indigenous peoples not the owners or stewards? How has the dominant assumption that "traditional" Aboriginal societies drew on the "natural" bounty of their forest homelands allowed for questions of "ownership" or "stewardship" of forests to be ignored (it is certainly not addressed in the WWF Canada report)? Can we continue to hold such assumptions?

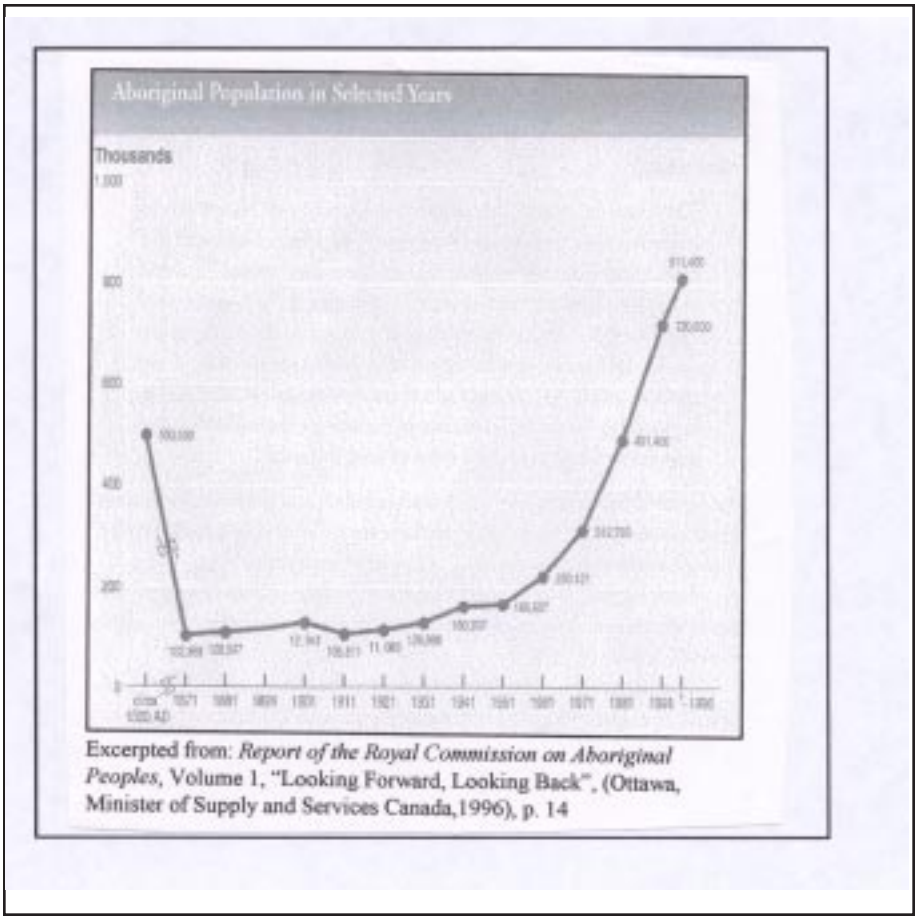
THE PEOPLE AND THEIR LANDSCAPES RECONSIDERED

In the changing context of the resource-based economy of northern Canada, one crucial aspect has not changed. In spite of a much greater awareness of "native issues" among non-Aboriginal Canadians in recent decades, most Canadians still generally appreciate northern Indigenous societies as "traditional."

Figure 3.—*Languages in North America-1980. (Photo courtesy of Academic America Encyclopedia, Grolier Inc., Danbury CN.*

The idea of traditional peoples inhabiting these forests is intimately related to the corresponding view that forests are wild and fragile as much as they are remote and vast. Such a romantic (or sometimes instrumental?) view of Aboriginal societies is rooted in what are probably ancient prejudices about hunter-gatherer societies. Chief among these prejudices is that traditional people could not tame or conquer wilderness because of their "primitiveness." These societies lived in a "state of nature," and remnants of these ideas are still with us today. Consider the following statement:

> For most of the time that human beings have inhabited the earth, they have been hunters. As **palaeolithic hunters**, they developed an assortment of life-sustaining spiritual, material, and strategic arts and accumulated a detailed knowledge of the environment and of the animal species in it. **They stalked mammoth, elk, bison and other great quarry tens of thousands**



Excerpted from: *Report of the Royal Commission on Aboriginal Peoples*, Volume 1, "Looking Forward, Looking Back", (Ottawa, Minister of Supply and Services Canada,1996), p. 14

Figure 4.—*Aboriginal population in selected years.*

> **of years ago**, using meticulously crafted arrow points. They trapped and fished, employing ingenious implements and techniques, in order to capture smaller wild game for food. Even today, in an often harsh and unforgiving world dominated by modern technology, tiny islands of **neotraditional** existence remain. **There are places, however imperiled, where hunters still venture out, much as they have in the past - into lush tropical Malaysian or Amazonian jungles, across sun-baked Australian or African grasslands or plains, along ice-choked Arctic shores - in order to supplement their diets with the high-quality protein of freshly killed animal flesh**. (Knudtson and Suzuki 1992, 81-82).

It is disconcerting to many Indigenous peoples living in forest communities today that such images can help foster a paternalistic attitude of "protection" (or practices of domination and neglect) on the part of "technologically advanced" industrial societies. This is directed not only towards Indigenous peoples, but also towards the wild and fragile landscapes evoked in the statement above.

Too often, these externally imposed attitudes and practices have been blind to the complexity of historical and contemporary customary Indigenous relationships to land within forest regions. Nothing highlights this more than the statements of Indigenous people themselves. I would like to refer to, and then reflect upon, two such statements—one from a cold temperate forest landscape in northern Ontario (Temagami region) and another from a boreal forest landscape in northern Alberta.

Consider the following words from the autobiography of Madeline Theriault, an Ojibwe woman who was raised in the Temagami region of northern Ontario. This is a region where environmentalists and forest companies have hotly contested how external control (through the provincial government) should be exercised over its ancient forests, many of which contain remnant stands of old-growth, wild, white pine forests.

> WHITE MAN MAKES A FARM to grow hay to feed his animals. He also grows vegetables for food. Indians also feed their animals, only in a different way. Around the middle of April, the Indian trapper looks around to find a bare spot, mostly up on the rocks where the snow goes first, where there is still a lot of snow at the bottom of the hill. They set a match to this bare spot and only burn where it is dry and bare, so there's no danger of a big forest fire because the fire stops when it reaches snow.
>
> Two years later you would find a big patch of blueberries in amongst the bushes. And you would see all the hungry animals of all kinds feeding on those blueberries; fox, wolves, black bear, partridge, squirrels, chipmunks, and all kinds of other birds. No doubt they were happy to find those berries. It was the trapper that got it for them by setting the fire.
>
> This is what I mean when I say Indians feed their animals too. The berries were for our own benefit too. As we would preserve them for our winter use. After a few years, young trees would grow on that burnt place. Then the rabbits would get to feed from those young bushes. In later years, the little trees would get bigger. Then the moose and deer get to feed from it. So, you see the setting of these small fires can go a long way in feeding many animals (Theriault 1992, 74-75).

This statement is deeply revelatory about customary Ojibwe livelihood relationships to forest landscapes. Not only does it say much about the "nature" of the Temagami forests in which the Ojibwe people have lived, it also encodes many of the objectives of customary Ojibwe "forest management." It is clear from the statement that the customary landscape management practices referred to were derived from an intimate understanding of resource energy cycles and ecological succession patterns. Indeed, it celebrates the diversity of these cycles and patterns. More than this, it celebrates how human interaction with forest landscapes—interaction that creates indigenous anthropogenic landscapes—can actually nurture resource abundance and diversity. It is clear that this statement reflects forest management practices focused on much more than timber resources. I will say more about this later in relation to the idea of pursuing economic security through a broader range of forest resources in contemporary forest communities in northern Canada.

Consider also the words of Indigenous elders recorded by Henry T. Lewis in the boreal forest region of northern Alberta. This is a region where environmentalists have questioned the ecological consequences of new forest harvesting activities by the pulp and paper industry.

> It used to be all prairie here; now it's mostly forest. My father told me that long time back there were plenty of buffalo here, all the way (north) to Cold Lake. We were Plains Cree, not like those bush people up north. Now it's all bush here too (Cree, 72, Frog Lake Area) (Lewis 1982, 24).
>
> They used to burn places where they think it was very useful. Like, for instance, the places where the horses used to winter in order to have plenty of good feed for them on grass; and then where there's lakes, around lakes, where there's muskrats, so they could always have real fresh roots. (Muskrats) live on grass roots mostly to keep them nice and fresh. If they don't (burn) the roots will spoil and rot you know, and then they'll die off every so many years. Places where there's moose and where the moose usually like to roam around. They burn the brushes there so that they'll have good green leaves and things to live on in summer. And, places where the Indians live close to...they'll be brushes like you see around, poplars growing in one place, eh. That's where they used to burn (Beaver woman, 69, High Level area) (Lewis 1982, 29).

These statements are as revelatory as those of Theriault from the Temagami region in Ontario. They demonstrate how Aboriginal peoples employed customary landscape management practices—using Indigenous pyrotechnology—to transform large landscapes for livelihood purposes. They confirm intimate Indigenous knowledge of ecological succession patterns and their control for human purposes. In this context as well, they celebrate the value of

diversity and abundance, as well as the possibility of nurturing both simultaneously. What is clear from the foregoing statements is that there is more to the "nature" of the forest landscapes of northern Canada than seemingly meets the eye of the outsider—in this case the "settler society."

How could customary Indigenous relationships to land, the need for economic security, and the need to promote ecological sustainability converge into a new paradigm of forest livelihoods in northern Aboriginal communities in Canada? To begin with, statements such as those referred to should lead non-Aboriginal society to acknowledge that Indigenous landscapes characterized the "New World," even *Before the Wilderness* (Blackburn and Anderson 1993) of it arose in the consciousness of settler society. After the coming of the Europeans, this "New World"

> ...was less virgin than it was widowed. Indians had lived on the continent for thousands of years, and had to a significant extent modified its environment to their purposes. The destruction of Indian communities in fact brought some of the most important ecological changes which followed the Europeans' arrival in America. The choice is not between two landscapes, one with and one without a human influence; it is between two human ways of living, two ways of belonging to an ecosystem (Cronon 1983, 12).

The historical reality of "wilderness" landscapes across North America is that "...[i]n fact, enormous areas of the continent's forests and grasslands were very much cultural landscapes, shaped profoundly by human action" (MacCleery 1996, 44). This history must become part of the popular consciousness of settler society in Canada.

It is necessary, however, to go even further than this. The contemporary value of customary Indigenous knowledge systems and institutions for promoting sustainable resource stewardship and economic well-being for northern Aboriginal forest communities in Canada should also be realized. This can happen, however, only when dominant settler society acknowledges that customary Indigenous Knowledge systems constitute valuable forms of "technology" or "technological knowledge" (Lewis 1989, 940). If we ever are to fully acknowledge the sophistication and complexity of "traditional" Indigenous customary relationships to land, we must neither conveniently nor "...inadvertently overlook the artifice behind technology in favour of the artifacts that it produces....[T]echnology should be seen as a system of knowledge rather than an inventory of objects" (Riddington 1982, 471). That societies have been able to achieve economic security as well social and cultural well-being by other means—affluence without materialism—should not blind us to the contributions that these knowledge traditions and social institutions can make to sustainable resource management today.

In western boreal forest landscapes, for example, the research of Henry Lewis has demonstrated that "...the hunter-trapper-gatherers of northern Alberta both increased and diversified available natural resources with the use of controlled burning" (Lewis 1982, 7). Are such practices anachronistic today? Certainly, they continue to have value as strategies that could be employed to increase biological diversity and abundance in forest ecosystems. More than this, they may well have value towards maintaining or restoring the very integrity of some of our most cherished ecosystems. This aspect of customary Indigenous resource stewardship must be grasped by the "popular mind:" The powerful image of the primeval forest causes some otherwise well-informed people to propose systems of inviolate preserves where human intervention is prohibited. Yet in most fire-prone ecosystems, continued human interaction will be essential to maintain them in a pre-European condition. A prime example of such an inviolate preserve is the Boundary Waters Canoe Area Wilderness in northern Minnesota [bordering on Quetico Provincial Park in Ontario]. As the late Miron "Bud" Heinselman, USDA Forest Service ecologist, demonstrated, the exclusion of fire from the Boundary Waters has doomed large stands of nearly pure red pine and white pine. In the decades ahead, they will be taken over by spruce and fir (MacCleery 1996, 48). The value of customary Indigenous pyrotechnology in these types of settings makes it understandable that Lewis and Ferguson would use the form of a prescription to entitle a paper on this topic in relation to the boreal forest: *Yards, Corridors, and Mosaics: How to Burn a Boreal Forest* (Lewis and Ferguson 1988, 57).

Indigenous resource management practices such as those outlined above have typically been embedded in local institutions of resource management. Such institutions are the means by which diverse, resilient, and abundant landscapes have been maintained by local groups in various parts of the world (Berkes 1989, 74-76). It should now be clear that these Indigenous landscapes are, in fact, the result of customary Indigenous resource management knowledge and practice that profoundly impact the environment.

Why should Indigenous customary resource institutions be so often found to nurture resource abundance and diversity? In no small part, it is because these local institutions have typically been embedded in practices of cooperation and equity (Chapeskie 1999). Through cooperative practice at the local level, communities can create adaptive strategies that maintain "...relatively high levels of diversity in the managed landscape" (Berkes *et al.* 1993, 4). Local institutions of cooperative resource management are able to prevent tragic losses of diversity in several ways. Among the most significant of them is that such institutions are based on traditions of equity and cooperation that discourage resource "overexploitation" in local unenclosed landscapes. These institutions are also sensitive and able to incorporate ecosystem feedback information. What, then, is their meaning for forest landscapes in northern Canada today?

A NEW PARADIGM FOR SUSTAINABLE FOREST LIVELIHOODS IN NORTHERN FOREST COMMUNITIES IN CANADA

Achieving economic security for Indigenous peoples within the forest landscapes of northern Canada constitutes a distinct challenge for the whole country. Could this challenge also be an opportunity to develop a new paradigm of "best practices" for sustainable forest resource use? The value of customary Indigenous "common property" relationships to land for promoting biodiversity conservation and sustaining ecological resilience is now well recognized and supported by expansive scholarly literature, of which only a fraction has been referred to in this paper.

However, this is only part of the story. The fact remains that, in northern Canada, Indigenous peoples have precious little voice in how the natural resources of their ancestral forest homelands are managed. There is not a single instance of Indigenous tenure for any forest resource (timber or non-timber forest products), for example, in northern Manitoba or Ontario. In most provinces in Canada, there is not even a legal framework for recognizing NTFP tenure in general, let alone Indigenous tenure in particular. In spite of the fact that Indigenous peoples constitute the majority of people living within the northern landscape, the vast bulk of forest tenure in existence is held by "outsiders." Given current demographic patterns in northern forest communities, this Aboriginal majority is rapidly increasing.

For Aboriginal communities in northern Canada, this issue has now become one of cultural survival. In adapting to the influence of the outside world, Aboriginal communities have been working their own particular praxis of contemporary community-based economic development. The Community Economic Development (CED) paradigm emerging out of this praxis is not based on isolation or cultural separation, but on mutuality. It is broadly participatory and even invitational in character. It promotes the idea of partnership between Indigenous communities, public, and private sectors. It expresses the urgent need to establish appropriate contemporary livelihood opportunities for Aboriginal people living in forest communities, but it also seeks to do this on terms allowing for local adaptation and cultural survival. The model that it employs is one of consensus-based economic decision-making for forest-based livelihoods where outside partners—often large corporations—work together with Indigenous people.

This new CED paradigm is being increasingly expressed by various Indigenous leaders and groups. It is expressed well in the words of Romeo Saganash, an official with the Grand Council of the Cree in Quebec, cited in a major Quebec newspaper:

> "First of all, most projects, if not all projects, in the territory were undertaken without the consent of the Crees beforehand. That consent element in the new approach is something that is worthwhile for us. It is definitely new. And it forces us to take some time to reflect on what we can do with this new situation. Part of the new Cree situation involves an influx of 500 young people entering the job market every year for

> the next decade," Saganash said. "Whether the new jobs will come from tourism, forestry or Hydro-Quebec projects involving Cree partnership are all options that desperately need to be worked out in a society where about 30 per cent of people still make a living from hunting, fishing and trapping. ..." Saganash cited economic development in Waswanipi, where construction of a sawmill two years ago created 75 jobs in a community of 1,000 people. [This is a joint venture partnership with Domtar Ltd. with the Crees owning a majority stake in the business.] "I think more and more we will be seeing that type of development initiative taking place in Cree communities. We have no choice"...Saganash said (Siblin 1999, A7).

In the context of the analysis presented in the previous pages of this article, there is a significant opportunity for Aboriginal people living in northern forest communities to nurture this new paradigm for forest livelihoods. What are its potential benefits? How can it be fostered?

In several critical aspects, there is significant potential to foster this paradigm. First, this potential relates to the "forestry frontier" in northern Canada. As has been noted, these lands are also the homelands of Indigenous peoples—where most of the people living on them are Aboriginal. There is an opportunity to "explore" and implement community-based forms of resource tenure and stewardship practice where Indigenous knowledge and customary resource management expertise is given "pride of place." It is within such models that customary resource management techniques and knowledge stand the best chance of being practiced, and are given the opportunity to adapt to new livelihood pursuits—including those that are "industrial" or "high tech."

The model of community-based resource tenure management for the forestry frontier in northern Canada provides an opportunity that transcends "politics of culture" and "politics of race." It emphasizes the "local" in resource management, and the benefits that local resource management and tenure can bring for maintaining diverse and abundant ecosystems as well as healthy communities within them.

The implication of the resource cycle theory in forestry points to the immense difficulty of restraining overexploitation in our contemporary economy: "...the removal of impediments to the free operation of markets is not enough—the market cannot accelerate natural regeneration, but it can accelerate depletion. Similarly, the establishment of secure property rights will not prevent overexploitation if the underlying market incentives favour rapid drawdown. Privatization is doubly perilous for sustainability, in that it is often used to justify resource giveaways (Dauvergne 1997). For biological resources with a slow reproduction rate...only state management, international agreements, and intense public scrutiny have had any success at slowing rates of exhaustion" (Clapp 1998, 139). The literature of community-based resource management suggests that even state management may not be sufficient to prevent resource exhaustion over the long term. However, it does point to the efficacy of community-based resource management to sustain natural resources over the long term (Berkes and Folke 1998). This efficacy is particularly notable in communities that have effective customary institutions of resource management. This is especially in contexts where many considerations (including the importance of a variety of resources for a variety of important social and economic purposes) beyond the "market signals" of the dominant economy will affect resource use (Chapeskie 1995).

Even in forest landscapes where Aboriginal communities live alongside settler communities, there is significant potential to promote community-based resource management. In the boreal forests of Canada, for example, tenure and management are typically focused on a very few dominant timber species. Such species are harvested for only a few uses (pulp and paper, lumber). Customary Indigenous forest management practice in these forests sometimes seems as if it was focused on every forest resource (from the creation of forages for ungulates to fruit harvested for domestic and commercial use) but timber! In the 20th century, for example, Frances Densmore, who originally went to study Ojibwe music in northern Minnesota and northwestern Ontario, got caught up with another fascination—Ojibwe (or Chippewa) plant use. Within a relatively short period of time, she catalogued an impressive

array of Ojibwe uses for more than 200 plants and trees (Densmore 1928). Within the forests of northern Canada, there is the potential to generate many economic opportunities from special forest products including NTFPs. In such cases, applying the concepts of pluralism and consensus-based decisionmaking to resource management between Aboriginal communities and other forest stakeholders offers considerable potential (Chapeskie 1995). This can be in the form of new business opportunities within which local forest livelihoods and forest resources can be sustained over the long term.

In the context of the foregoing, and even more for the future of our forests, it is important to remember that "resources are not; they become." Why would the larger public and private sectors be interested in pursuing a new paradigm of forest livelihoods with northern Indigenous communities of Canada? To begin with, if anything should be clear to anyone concerned with the future of our forests, it is that the only constant characterizing these forests will be change. From environmental factors to accelerating technological developments transforming the global economy, change is now a constant for forest communities and stakeholders. While the demand for forest resources continues to rise on a global scale, technological innovation in the form of mechanization continues to make more and more forestry workers redundant. Forest communities in northern Canada generally are in crisis. In the context set out in this paper, the future of Indigenous forest communities, which have historically been excluded from the larger forest economy, is even more fraught with danger. At the same time, significant opportunity also coexists within this crisis.

Aside from the potential of Indigenous knowledge and customary forest stewardship practice to contribute to the sustainable use of forest resources, Indigenous knowledge traditions have the potential to contribute significantly to a diverse "best end use" and "highest value use" forest economy. Indigenous traditional ecological knowledge (TEK) has the potential to serve as a "partnership resource" in fostering a diverse forest economy in northern Canada that places priority on community-based participation. For many years now, TEK has been used as a resource by outside interests for economic purposes. It has often been seen as "a gift for the taking."

Such an approach to Indigenous knowledge of forest resources and resource management practice does a disservice to the Indigenous peoples from whose knowledge traditions has been realized much "outside" commercial gain from forest resources. It is also seen by most Aboriginal people as fundamentally disrespectful. But in addition to this, it has the potential to foreclose on many other fruitful opportunities for successful economic collaboration and partnership to be achieved between Indigenous people and "outsiders."

There is, for example, an emerging popular interest in how the potential uses of birch bark are being pursued. The bark of the white birch is a "forest product" that has had numerous traditional uses among the Ojibwe people. It is these traditional uses that have in no small way inspired "outside" researchers to explore their broader application. Those who have the technological capacity to carry out this research would do well to consider that other equally significant potential opportunities might arise. This could happen through establishing strong and enduring collaborative partnerships with Ojibwe people to pursue the broader potential of these uses. In one discussion on the topic of the uses of birch bark that I had recently with Ojibwe people who are engaged in forest livelihood pursuits, I was presented with an array of other special forest product possibilities from other trees—uses that I had never come across before. They were intriguing to say the least. Do they have a broader application? Who knows. Certainly, however, the partnership approach to exploring them is worth serious consideration—not only for what "outsiders" can learn from Indigenous people, and vice versa, but how they might each contribute to the economic well-being of their respective societies.

SUMMARY

This paper has considered how a new paradigm of forest livelihoods might be built to foster the economic security and cultural well-being of Indigenous communities in the forest regions of northern Canada, and what this new paradigm might look like. This new paradigm is steeped in consensus-based decisionmaking and collaborative cross-cultural economic partnerships. To realize this paradigm constitutes a tremendous challenge. Not least of this challenge is the task of settler society in Canada to

let go of some of its most long-standing assumptions about Indigenous societies in this country.

I would like to state this challenge in practical terms: To focus on the ecological knowledge or even resource management practices of Indigenous peoples as "traditional" sets up what I have come to see as a problematic dualism between this knowledge and the knowledge of what are called "advanced" industrial societies. This dualism makes it too easy for "us" in "advanced industrial societies," especially those of us belonging to groups with vested interests in the northern forestscapes of Canada, to instrumentalize the "value" of "traditional" knowledge for our own purposes. Such a dualism leads to a view that appreciates the value in TEK solely in terms of our advanced industrial societies (e.g., it can be of value in state management of natural resources; it can provide pharmaceuticals for us). Such a dualism also tends to neglect the more profound significance and meaning of the economic, social, and cultural values of the societies out of which so-called TEK has arisen. Simply put, no matter how this dualist discourse of scientific, traditional, or Indigenous knowledge is presented, the implication is that some societies are more evolved than others. It even draws the conclusion that some societies are living in static, primitive, or fossilized states.

We must discard the ideology of the "traditional" Indigenous person, whether that person lives in the Canadian sub-Arctic or in Amazonia, as a "hunter-gatherer" practicing a way of life that "...involves subsisting primarily on wild plants and animals...[without the capacity] to regulate the growth and reproduction of the life forms on which people depend" (Plog *et al.* 1980, 210). Such assumptions can no longer serve our long-term ecological and economic interests. Rather, we must adopt a new paradigm that allows us to see how, for example, "[n]ative peoples' interactions **both past and present** with native plants, may offer some interesting yet novel [to non-Indigenous people], approaches to wildland management... [that] may prove effective safeguards against their rarity" (Anderson 1993, 173). This understanding can be applied to the whole range of resource management questions we face with respect to biodiversity conservation today. Equally important for Indigenous communities, it can foster collaborative strategies for economic security that are rooted in the deepest aspects of Indigenous culture.

This issue is crucially important for the economic well-being of Indigenous peoples in the northern forest regions of Canada. But, as I have noted above, it is also important in the context of the broader issue of biodiversity conservation. The issue of biodiversity conservation is generally considered to be one of the most important of our time. The present global ecological "extinction spasm" we are witnessing is viewed as threatening the very foundations of future human security (Wilson 1988). We have been told that, "...hope for the future is conditional on decisive political action now to begin managing environmental resources to ensure both sustainable human progress and human survival" (World Commission on Environment and Development 1987, 1).

In seeking guidance to a sustainable future, many in the "developed world" have turned their attention to the relationship between culture and conservation. Significant efforts are now being made to document and to understand the inextricable link between biological and cultural diversity (Wilcox and Duin 1995). A good number of these efforts are focused on the knowledge of Indigenous peoples of their lands and its potential value in biodiversity conservation efforts.

I believe that in the promotion of biodiversity conservation, for non-Indigenous people to understand and appreciate a deeper and more profound value of what some call traditional ecological knowledge (TEK) and what others call Indigenous knowledge (IK), it is necessary to move beyond focusing on the technical content of TEK or IK; that is, *what* Indigenous peoples know *about* the land. Rather, what is required is that we re-evaluate some of our most basic assumptions about the cultural contexts out of which TEK has arisen. We need to better appreciate *how* and *why* Indigenous peoples know what they know of their lands. We need to understand that while forest resources might be used for different purposes by Indigenous people in Canada today, Indigenous institutions and practices of customary resource stewardship have an enduring value for today and for tomorrow.

Taking up this task will also allow those of us who consider ourselves as being other than "Indigenous" or "traditional" to re-consider some of our most basic assumptions about our relationships with the "natural" others of our world. We need to understand the roots of the inadequacy of our discourse, as well as the inadequacy of the practice of resource management and conservation. By doing this, we can come to understand how, for example, the dualist idea of protecting some land from humans through conservation while allowing development on the rest of it may be ultimately futile. It is to concerns such as these that Indigenous knowledge has as much to offer as it does to fostering local Aboriginal economic security. Let us seize the present opportunity to address these concerns from our local forest communities through to the level of broad public policy and move toward meeting the challenge at hand.

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